

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Canceled)
2. (Currently Amended) The method in accordance with Claim [1] 40, comprising:

applying a torque density (torque per screw/axis distance³) of at least 7 Nm/cm³ to each screw of the extruder.
3. (Currently Amended) The method in accordance with Claim [1] 40, comprising:

applying a torque density (torque per screw/axis distance³) of at least 9 Nm/cm³ to each screw of the extruder.
4. (Currently Amended) The method in accordance with Claim [1] 40, wherein the Da/Di ratio is 1.5 to 1.63.
5. (Currently Amended) The method in accordance with Claim [1] 40, wherein the ratio for twin screw elements is $1500 < Am^3/Vf^2 < \underline{2030} ~~2020 and the ratio for triple screw elements is $3000 < Am^3/Vf^2 < 5000$.~~$

6. (Currently Amended) The method in accordance with Claim [1] 40, wherein the product to be processed is a ~~contaminated and/or humid~~ polycondensate that is at least one of contaminated and moist.

7. (Original) The method in accordance with Claim 6, wherein the polycondensate to be processed is polyester.

8. (Original) The method in accordance with Claim 7, wherein the polycondensate to be processed is a polyester PET bottle recycle.

9-14. (Canceled)

15. (Currently Amended) The method in accordance with Claim [13] 40, wherein the elastomer is a powdery or granulated elastomer in which at least one filling agent has already been incorporated.

16. (Currently Amended) The method in accordance with Claim [1] 40, wherein the screw ~~elements are provided with dense combs~~ shanks are tightly intermeshing.

17. (Canceled)

18. (Currently Amended) The method in accordance with Claim [1] 40, comprising:

controlling the temperature of the core and the housing, wherein the ~~extruder has a temperature-controllable~~ core and a ~~temperature-controllable~~ housing which are both stationary.

19. (Currently Amended) The method in accordance with Claim 18, comprising controlling ~~wherein~~ the temperature of the core and [of] the housing ~~are controlled separately~~.

20. (Original) The method in accordance with Claim 18, wherein the housing is divided into segments whose temperature is controlled separately.

21. (Currently Amended) The method in accordance with Claim [1] ~~40~~, wherein the ~~screws are disposed in a coronary annular configuration~~ screw shanks are arranged in a ring.

22. (Currently Amended) The method in accordance with Claim 6, comprising during processing applying ~~wherein during processing~~, the polycondensate ~~is applied~~ in a molten state and later hardening the polycondensate ~~hardened~~, wherein a total period during which a temperature of the polycondensate is above a melting temperature of the polycondensate during processing is less than approx. 60 seconds.

23. (Currently Amended) The method in accordance with Claim 22, wherein [the] a total period during which the temperature of the polycondensate is

above the melting temperature of the polycondensate during processing is less than roughly 30 seconds.

24. (Original) The method in accordance with Claim 22, wherein a content of residual water in the melt exceeds 200 ppm.

25. (Currently Amended) The method in accordance with Claim 22, wherein, in [its] an initial form, the polycondensate is a bulk material with a bulk density in a range from 200 kg/m³ to 600 kg/m³.

26. (Original) The method in accordance with Claim 22, wherein the polycondensate is present as chips or chippings.

27. (Currently Amended) The method in accordance with Claim 22, comprising partially pre-drying ~~wherein the polycondensate material is initially, partially pre-dried~~ prior to application in a molten state.

28. (Currently Amended) The method in accordance with Claim 22, comprising:

a degassing step during which volatile contaminations and/or decomposition products are removed from [a] the polycondensate melt.

29. (Original) The method in accordance with Claim 22, wherein the polycondensate is placed in the extruder in a solid state, the polycondensate is

heated to a temperature below a melting point, and the polycondensate is degassed and/or dried at a pressure below atmospheric pressure and/or while adding an inert gas.

30. (Original) The method in accordance with Claim 29, wherein a total time during which the polycondensate is in the molten state during the process comprises a first period during which the polycondensate remains in the extruder after application in the molten state and a second period during which the polycondensate, which is still in the molten state, is processed outside of the extruder.

31. (Original) The method in accordance with Claim 30, wherein a duration of the first period is less than approx. 15 seconds.

32. (Original) The method in accordance with Claim 30, wherein a duration of the first period is less than approx. 10 seconds.

33. (Original) The method in accordance with Claim 29, wherein processing of the molten polycondensate outside of the extruder includes filtering of the melt.

34. (Currently Amended) The method in accordance with Claim [29] 30, comprising ~~wherein the processing of the molten polycondensate outside of the~~

~~extruder includes~~ using a melt pump to process the molten polycondensate outside of the extruder.

35. (Currently Amended) The method in accordance with Claim 22, wherein upon hardening, the polycondensate is further processed to form a granulate made up of pellets.

36-39. (Canceled)

40. (New) A method for preparation of a product comprising:

supplying the product to a multi-shaft extruder;

rotating at least four individually driven, self-cleaning screw shanks of the multi-shaft extruder in a common direction about their own axes, each screw shank being arranged in respective single bore holes, and each screw shank having a smooth surface, an outer diameter D_a at a screw thread, and an inner diameter D_i at a screw base; and

forming a process space having a lateral area A_m formed by smooth bore hole surfaces and a free volume V_f formed between the screws and the bore hole surfaces;

wherein at least a portion of the process space has a ratio A_m^3/V_f^2 between 1020 and 3050 for two flighted screw elements at a D_a/D_i ratio of 1.3 to 1.7.

41. (New) The method in accordance with claim 40 wherein the product to be processed is an elastomer.